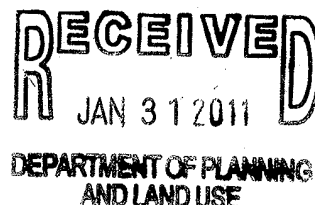


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November 19, 2008

San Diego Rural Fire Protection District  
14145 Campo Rd Ste 94  
Jamul, CA 91935



Attn: Dave Nissen, Fire Marshal

Subject: Fire Protection Plan-Short Form for Carnevale Tentative Parcel Map 21133, APN 513-092-34, 1863 Harbison Canyon Road, El Cajon

This letter is written in response to a request from the County of San Diego DPLU for a Short-Form Fire Protection Plan consistent with Article 86, Section 8601 of the California Fire Code, Section 4703 of the County Fire Code and San Diego Rural Fire Protection District Ordinance 2002-03 to address:

- **Location:** The project is located at 1863 Harbison Canyon Road, northeast of the intersection of Harbison Canyon Road and Los Caballos Lane. The project is located approximately four miles south of Interstate 8. The neighborhood surrounding the majority of the site is composed of rural residential properties. Located at the northeastern portion of the project site is a large undeveloped area where an individual finger of the eastern ridgeline of Harbison Canyon dissipates into the project site. The project is located within a State Responsibility Area.
- **Topography:** The project is located within Harbison Canyon. The site itself is gently sloped; however the surrounding areas are largely composed of steep slopes and mountainous ridgelines.
- **Geology:** The site is located within Harbison Canyon which is aligned in a northeast/southwest direction. This is also the general direction that Santa winds blow in. The valley may serve to compress and accelerate the winds.
- **Flammable Vegetation:** The site currently consists of a single family residence, two secondary dwellings, one of which is a one bedroom structure and the other is a studio, a detached 2 car garage, and non-native grasslands. The property may have been used for agriculture in the past. The adjacent properties appear to average 1-4 acres in size and are developed with single family residences. As a result, the majority of the site is surrounded by area that is required to be maintained for the safety of the existing residences with the exception of the northeastern portion which is uninhabited.
- **Climate:** As defined by the National Weather Service, San Diego has four climate zones: coastal, inland, mountain and desert climate. These climate zones are determined by several factors: proximity to the ocean, terrain, elevation and latitude. Using the Koppen

system, the metropolitan areas of Southern California have a Mediterranean climate, characterized by mild, sometimes wet winters and warm, very dry summers. The Mediterranean climate includes all coastal areas, valleys and foothills. Annual precipitation amounts increase gradually from the coast to the mountain crests, then drop dramatically into the deserts. Most precipitation comes from winter storms between November and March. The site is located within the foothills and valleys. Average rainfall is 18 inches per year.

- along with the following fire-related issues:
  1. Water Supply
  2. Fire Access
  3. Building fire resistance and ignition
  4. Fire Protection Systems
  5. Fire Protection Equipment
  6. Defensible Space
  7. Vegetation Management
  8. Fire Behavior Model

## **1. Water Supply.**

Hydrants are required along fire access roadways as determined by the Fire Marshal to meet operational needs, at intersections, at cul de sacs, and at intervals based on parcel size and County Fire Code Table 508.5.1.1.1-B. Minimum fire flow in wildland urban interface is 2500 GPM.

## **2. Fire Access Roads.**

### **Location:**

Fire access roads (including driveways) must be provided so that fire apparatus may drive within 150 feet of all portions of the exterior walls and be able to pull hoseline along approved pathways around all ground-level exterior portions of structures. Measurement is around the exterior - not through the structure - to all ground-level exterior portions of every structure.

### **Deadends:**

- a. Dead end driveways/roadways serving no more than two single-family dwellings do not exceed 150 feet in length, or are provided with emergency vehicle turnarounds meeting County Fire Marshal standards generally at the terminal end.
- b. Dead ends serving more than two single-family dwellings shall have a minimum 36 foot radius cul de sac generally at the terminal end. This proposed project will serve more than two single-family homes and proposes an access road 24' in width along with a 36 foot radius cul de sac at the terminal end.

**Width:**

All driveways must be improved to a minimum 16' width all-weather surface suitable for travel by 50,000 lb in conformance with County Fire Code (2008). Fire access roads serving more than two single-family dwellings shall be a minimum 24' all-weather surface suitable for travel by 50,000 lb. fire apparatus in conformance with County Fire Code (2008).

**Grade:**

Grades will range from 0-16% throughout the project site.

**Surface:**

All roads must be installed to the standards specified in Section I-M of the County of San Diego Off-Street Parking Design Manual. Surfacing material minimum standard is based on % grade:

- i. From 0% –10% slope, all-weather surface (minimum 4" D.G.)
- ii. From 11% to 14% slope, paving must be at least 2" asphaltic concrete.
- iii. From 15% to 20%, paving must be minimum 3" asphaltic concrete, or (for residential driveways) 3 ½" Portland cement concrete with deep broom finish perpendicular to the direction of travel to enhance traction.

The grade within the proposed project is 16% or less. The cul de sac is proposed to be improved with Asphaltic concrete. A portion of the driveways are proposed to be improved with Portland cement. The remainder of the driveways will be required at a minimum to have an all-weather surface of 4" D.G.

**Maintenance:**

Individual property owners are responsible for maintaining driveways, gates and signs on their own parcel in compliance with fire codes. Road easements, including gates and signs within the project, must also be maintained in compliance with fire codes in perpetuity.

3. **Building Construction Methods:** The construction methods for exterior wildfire exposure in a wildland-urban interface fire area shall be as provided in Chapter 7A of the County Building Code.
4. **Fire Protection Systems:** All dwellings and attached garages will have residential fire sprinklers per County Fire Code Section 903.2.
5. **Fire Protection Equipment:** (e.g. extinguishers) Although portable fire extinguishers are recommended, none are required for this project.

6. **Defensible Space:**

- a. A minimum 100 foot Fuel Management Zone, or to the property line where development occurs adjacent to the project site, shall be established and maintained around each structure per County Fire Code Section 4702.2.
- b. Under circumstances of small or narrow lots, building pads must be sited so that no portion of a building or projection is closer than 30 feet from nearest property line.

7. **Vegetation Management:** Prescribed Defensible Space shall be maintained on at least an annual basis or more often as needed. Planting within this region must be from an approved fire resistance planting materials list (list maintained by County of San Diego). Individual property owners are responsible for maintaining their own parcel in compliance with fire codes. Failure to maintain in fire-safe manner subjects owners to potential fines, and enforced abatement by the fire agency or the County, with charges, including administrative costs and penalties, lien against the property.

8. **Fire Behavior Computer Modeling:** Computer Fire Behavior Model not required for this project per County Fire Marshal. Initially, computer fire behavior modeling is not required for this project. However, if some code issues are unresolved or inadequately addressed, a full FPP, prepared by a wildland fire expert, may be required, including fire behavior modeling.

Name of Person Preparing this Report

*Signature, name printed, date and title of person preparing report:*

PREPARED BY: Robin Church Date: November 20, 2008

Printed Name: Robin Church Title: County-Approved Fire Consultant

Name of Property Owner

*Signature, name printed, date and title of property owner*

Owner [Signature] Date 01-28-2010

Printed Name KEITH CARNEVALE Title OWNER/APPLICANT

[Signature]

01-28-2010

JOY CARNEVALE

OWNER APPLICANT.